REMARKS

The present Amendment is in response to the Examiner's Office Action mailed September 21, 2006. Claims 29 and 41-46 are cancelled, claims 1, 4, and 20 are amended, and new claims 47-55 are added. Claims 1-28, 30-41, and 47-55 are now pending in view of the above amendments.

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicants request that the Examiner carefully review any references discussed below to ensure that Applicants understanding and discussion of the references, if any, is consistent with the Examiner's understanding.

I. <u>Examiner's Interview</u>

Applicant's express their appreciation to the Examiner for conducting an in-person interview with Applicants' representative on October 19, 2006.

II. Obviousness Type Double Patenting Rejection

In the Office Action, the Examiner rejects claims 1, 2, 3, 7, 8, 11, 18, 20, 24, 28, 29, 31, 32, 33, 34, and 35 under the judicially created doctrine of obviousness-type double patenting in view of Application Serial No. 10/282,579. Applicants submit herewith a terminal disclaimer relative to Application Serial No. 10/282,579 in order to overcome this rejection. Withdrawal of this rejection and allowance of the pending claims is respectfully requested in view of the terminal disclaimer.

III. PRIOR ART REJECTIONS

A. Rejection Under 35 U.S.C. §102(e)

The Examiner rejects claims 1-17, 19-27, 29-35, and 36-37 under 35 U.S.C. § 102(e)¹ as being anticipated by *Aronson et al.* (United States Publication No. 2002/0149821 A1). Claim 29 has been canceled, therefore the rejection of claim 29 is moot. Because it has not been shown that *Aronson* teaches each and every element of the rejected claims, Applicants respectfully traverse this rejection in view of the following remarks.

A claim is anticipated under 35 U.S.C. § 102(e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Further, the identical invention must be shown in as complete detail as is contained in the claim. Finally, the elements must be arranged as required by the claim. *Manual of Patent Examining Procedure ("MPEP")* § 2131.

Claim 1, as amended, includes the element, "means for <u>setting</u> a signal parameter in response to signal parameter programming instructions, the signal parameter corresponding to a signal associated with at least one of: the post-amplifier assembly; and, the laser driver assembly, wherein the signal parameter includes <u>polarity</u>" in combination with each and every other element of claim 1. (Emphasis added). The patent office has not established that *Aronson* teaches this element in combination with every other element of claim 1 as required by MPEP 2131. According to MPEP 2181 Section I, "[a] claim limitation will be interpreted to invoke 35 U.S.C. 112, sixth paragraph, if it meets the following 3-prong analysis:

- (A) the claim limitations must use the phrase "means for" or "step for;"
- (B) the "means for" or "step for" must be modified by functional language; and
- (C) the phrase "means for" or "step for" must not be modified by sufficient structure, material or acts for achieving the specified function."

35 U.S.C. 112, sixth paragraph is invoked for the above element because the element uses the phrase "means for," which is modified by functional language "[for] setting a signal

¹ Because *Aronson* is only citable under 35 U.S.C. § 102(e) Applicants do not admit that *Aronson* is in fact prior art to the claimed invention but reserve the right to swear behind *Aronson* or perfect the priority of this application as needed and/or if necessary to remove it as a reference.

parameter" and is not modified by sufficient structure for the claim function. The Applicant's disclosure provides structural support for such functional limitation.

After the Patent Office has identified the corresponding structure support in the Applicant's specification the Patent Office must point to equivalent corresponding structure in the Prior Art. More particularly, the structure identified must (A) perform the function specified in the claim, (B) not be excluded by any explicit definitions provided in the specification for an equivalent, and (C) must be an equivalent of the means-plus function limitation. MPEP 2183.

Aronson teaches an integrated memory mapped controller circuit for fiber optics transceivers. Aronson teaches that a purpose of the fault control and logic circuit 133 is to determine the polarity of its input and output signals. Paragraph [0043] (emphasis added; also see paragraph [0036].

<u>Determining</u> polarity is not the same function as <u>setting</u> polarity. Therefore, the Applicant respectfully requests that the rejection of claim 1 be withdrawn. Claims 2-10 depend from claim 1. As such, the Applicants respectfully request that the rejections of claims 2-10 be withdrawn at least for the same reasons as claim 1.

Claim 11 includes the element, "a laser driver assembly configured for communication with the optical transmitter and implemented together with the post-amplifier assembly in a single IC...." (Emphasis added). Claim 20 includes the element, "a laser driver assembly configured for communication with the optical transmitter, wherein the post-amplifier assembly and laser driver assembly are integrated together in a single IC...." (Emphasis added). In direct contrast, *Aronson* discloses that the post-amplifier and laser driver are on separate integrated circuits.

For example, paragraph 26 of *Aronson* teaches the following:

[0026] A transceiver 100 based on the present invention is shown in FIGS. 2 and 3. The transceiver 100 contains a Receiver Optical Subassembly (ROSA) 102 and Transmitter Optical Subassembly (TOSA) 103 along with associated post-amplifier 104 and laser driver 105 integrated circuits that communicate the high speed electrical signals to the outside world. In this case, however, all other control and setup functions are implemented with a third single-chip integrated circuit 110 called the controller IC.

(Emphasis added).

Consistent with the text, Figure 2 of *Aronson* (reproduced below) clearly shows post-amplifier 104 and laser driver 105 on separate integrated circuits.

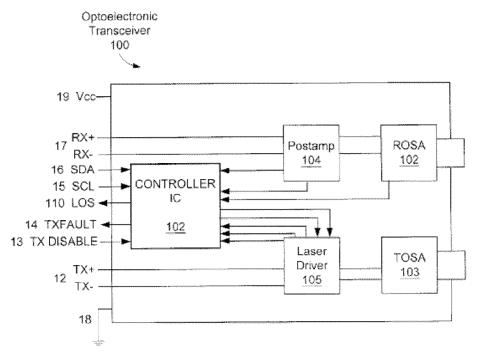
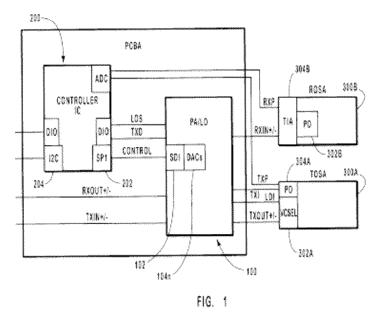


Fig. 2

In contrast, Figure 1 of this application (reproduced below) clearly shows an embodiment with an integrated post-amplifier and laser driver ("PA/LD") assembly 100 embodied in a single integrated circuit.



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Therefore, it has not been shown that *Aronson* teaches each and every element of claim 11 or claim 20 as required for a *prima facie* case of anticipation. As such, the Applicants respectfully request that the rejection of claims 11 and 20 be withdrawn. Claims 12-17 and 19 depend from claim 11, and claims 21-27, 29-35, and 36-37 depend from claim 20. Therefore, the Applicants respectfully request that the rejections of claims 12-17, 19, 21-27, 29-35, and 36-37 be withdrawn at least for the same reasons as claims 11 and 20.

With regard to claim 18 and 28, the Applicants further note that claims 18 and 28 are also allowable for reasons similar to those set forth above with regard to claim 1.

Claims 41-46 have been canceled, therefore the rejection of claims 41-46 is moot.

IV. Allowed Subject Matter

The Examiner's allowance of claims 38-40 is appreciated. Applicants wish to thank the Examiner for the careful review and allowance of those claims.

IV. New Claims

Claims 47-55 have been added and depend from claims 1, 11, 20, or 42. Therefore, Claims 47-55 are believed to be allowable at least for the same reasons as claims 1, 11, 20, or 42.

CONCLUSION

In view of the foregoing, Applicants believe the claims as amended are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

Dated this 22nd day of January, 2007.

Respectfully submitted,

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